

http://www.ecole.org

BUSINESS LIFE SEMINAR

Session of 4 March 1994 (51st session)

THE RESEARCHER'S SCHEDULE Making good use of deadlines and rituals

by

Michel BERRY

Former director, CRG (Management Research Centre), Ecole Polytechnique, Paris (France)

Abstract

Business people believe that researchers have a quiet life. They're wrong: researchers, too, are overwhelmed with work. This is due to a discrepancy between the amount they should do to achieve what is expected of them and the time they actually have to do it. At a certain stage in their lives they may simplify things by producing less ideas, whilst still working a good deal. However, there are certain stimulants especially adapted deadlines and rituals... just as there are in business itself.

Ours Sponsors :

Accenture Air Liquide* Algoé** ANRT AtoFina Caisse Nationale des Caisses d'Épargne et de Prévoyance CEA Chambre de Commerce et d'Industrie de Paris CNRS Cogema Conseil Supérieur de l'Ordre des Experts Comptables Centre de Recherche en gestion de l'École polytechnique Danone Deloitte & Touche DIGITIP École des mines de Paris EDF & GDF Entreprise et Personnel Fondation Charles Léopold Maver pour le Progrès de l'Homme France Télécom FVA Management Hermès IBM IDRH IdVectoR* Lafarge Lagardère Mathématiques Appliquées PSA Peugeot Citroën Renault Saint-Gobain SNCF Socomine* THALES TotalFina Elf Usinor

* Only for the séminar Technological Ressources and Innovation ** Only for the séminar Business Life

(in februar 2001)

I - PRESENTATION by MICHEL BERRY

We hear a lot about 'armchair researchers' - but actually researchers are always in a hurry, and are often to be heard complaining about their schedules. What causes this state of affairs? How do they manage? What can be done to help? This presentation is a study into the behaviour of the overworked researchers.

I aim to show that the demands on the researchers' time stem from a discrepancy between what researchers should do and what they actually can do in the time available. They are therefore obliged to juggle tasks which are more or less urgent, more or less easy to fulfil. They may even find a certain reassurance in life through hurry, which gives a pretext for delaying the more difficult activities such as formulating new ideas. I shall therefore demonstrate that one way to organise research is to create appropriate rituals and deadlines. In this way I shall echo other sessions in the 'Business Life' seminar series which also discussed hurry, deadlines and rituals¹.

THE 'IDEAL' RESEARCHERS' WEEK

In order to illustrate the discrepancy between what should and what can be done, I shall use a flexible model applied to the CRG, which I know extremely well, having been its director for fifteen years. I'll estimate the average working time of 'ideal' management researchers². These ideal researchers are not necessarily genius, but the equivalent of good students who get good grades in all subjects. I'll follow them through the different stages of their career and prove that they really need one-and-a-half to two-and-a-half times as many days in the week as there actually are.

Ideal thesis students : 7 *days* per week for researchers, 8 *days* if they have teaching *duties*

Fieldwork: 2 1/2 days

The CRG's work is based on pure research in response to requests from organisations³. If the response to demand is well managed, it's possible to fulfil expectations and also contribute to the increase of knowledge. When the CRG was set up, we decided that fieldwork should take up half our time.

Exchange of opinions: 1 day

The CRG style involves a high level of dialogue within the centre. Formal and informal exchanges take up the equivalent of one day a week.

Reading: 2 days

The ideal researchers are well-informed in the topics they write about. They might be able to keep pace in one discipline by reading for one day a week, but the CRG is at the crossroads of various disciplines. If we reckon that they have one major subject and several subsidiary ones, they can probably get away with two days' worth.

Writing: 1 1/2 days

If they are to be judged along the same lines as good academic theorists, the management researchers have to produce a comparable volume of publications. This means about 80 pages a year, if we add up all the articles, notes, communications and books. At the CRG it's often said that the ratio for a quality paper (which takes several drafts) should be a page a day. This gives

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris

tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org

¹ Notably sessions no. 19, '*Grands projets*, organisation and urgency (Jean-Claude Moisdon) (available in English); no. 28, 'Comment réussir un projet imposible. (How to succeed with an impossible project)' (Yves Dubreil); no. 43,

[&]quot;Rites, rituels et ritualismes (Rites, rituals and ritualisation)' (Claude Riveline).

 $^{^{2}}$ For the sake of convenience I use the term 'management research' to refer to the work of the CRG, which doesn't mean to say that it's the only kind of management research there is.

³M. Berry (1995), "Research and the Practice of Management, a French View", *Organization Science vol. 6 N°1, jan feb 95, P. 104-116*

us the figure of about $1 \frac{1}{2}$ days a week.

Teaching (for researchers with teaching duties): 1 day

Thesis students with teaching duties don't have a full teaching timetable, but have to teach for one day a week.

Ideal academic researchers : 8 days per week, 9 1/2 days if they have teaching duties.

Seminars and primary responsibilities : 1 day

After completing their postgraduate degree, the researchers will take part in seminars and forums (1/2 day) in order to make their work known and contribute to scientific debate. They will also have primary responsibilities in administration and in heading scientific projects (1/2 day). These duties are in addition to those described above.

Teaching: 1 1/2 days

If they also have teaching duties, these will now take up $1 \frac{1}{2}$ days.

Ideal research directors : 11 days per week.

Supervising postgraduates and teaching at doctorate level: 1 day

Research directors will supervise at least three postgraduates, and teach final year undergraduates. Since postgraduates are deeply involved in the field, and follow an inductive learning process⁴, they have to be closely supervised. Ideal research directors will devote a half-day per fortnight to them, as well as teaching finalists and being involved in assessing theses.

Teaching other than postgraduate level: 1/2 day

Research directors will have other university teaching work, and will be involved in staff training for companies. Ideal directors, however, will limit the amount of staff training they take on, even though it is well-paid: they would prefer to produce their own work.

Responsibilities in leading projects: 1/2 day

They will have a key role in the sharing of scientific knowledge, and will have responsibilities for journals, seminars, editing collections of publications, and so on.

Duties as representative: 1 day

Since they hold a key position in networks they will be asked to join projects, conferences, commissions and advisory bodies, and to back the launch of new projects. These activities will also comprise a number of exchanges by post, telephone, fax and e-mail, along with interviews and meetings.

Since ideal directors are ideal professionals, these duties are to be added to the list above.

Ideal laboratory directors : *12.5 days per week*

Ideal laboratory directors are ideal research directors with added responsibilities. In a centre like the CRG where the director can count on the support of efficient staff, he or she will carry out these duties in $1 \frac{1}{2}$ days a week.

THE EFFECTIVE RESEARCHERS' PRUNING PROCESS

If we reckon that ideal researchers are also good spouses, and that they are also good parents,

⁴In inductive approaches, the interpretative system is built up in the course of the process. Such approaches are more appropriate to field research, but are more difficult to carry out and more risky than the traditional hypothetico-deductive approach in which a set of pre-established hypotheses is tested.

this means compressing the duties I have listed into five days, keeping the weekends for the family. The discrepancy between the theoretical workload and the time available therefore grows in the course of the researchers' career, meaning one-and-a-half to two-and-a-half times more work than there is time for.

Although this model was applied to the researchers at the CRG, they aren't of course the only ones to have problems with their schedules : there are some who have more teaching, for example. Indeed, the model shows that *all* research directors have an overloaded schedule.

The researchers' choices and identity

Effective researchers will therefore 'prune' their schedule in different areas : fieldwork, reading, writing, collaboration, supervisor's duties, teaching, administration or the family. Naturally they will save time if they read and write quickly, or if they have particular skill in formulating assessments of problems. However, they can't cut down on interactions with other people (interviews and meetings) without compromising their contribution. Even the quick workers have to make choices, unless they are at the beginning of their career.

The cuts they make will be dictated by their institutional setting, and, of course, by their own preferences.

If they are under a lot of academic pressure, cutting down on writing and reading could seriously damage their career; so they may do better to specialise in a narrow area and be individualists, which is what the American system encourages⁵. If they are under a lot of economic pressure, they will spend too much time in the field to produce the quantity and quality of writing they need to have good academic reputations. If they have a heavy teaching load, it will be difficult for them to spend a lot of time in the field.

Within these constraints, they will exercise their own preferences. If they consider reading and writing essential, they will spend less time in the field by avoiding subjects which are very demanding. If they enjoy the fieldwork, they will find it difficult to write as many articles as are expected of them. This is always supposing that their activity is influenced more by their preferences than by the ease of managing their schedule.

Urgent and important

In effect, the breakdown I started with only considered activities in terms of time taken. In fact, the tasks which are more pressing and which are easy to carry out often take precedence over the ones which are less immediate and more difficult. Let's look at the pattern of setting priorities on a day-to-day basis. Jean-Luc Delpeuch and Anne Lauvergeon considered that managers had three kinds of activities⁶:

- statutory activity, which is made up of formal obligations;

- profiled activity, which comprises the requests addressed to the manager;

- *creative activity*, which consists of the activities on which managers set their personal stamp; such activities are supposed to fit into gaps in the schedule, which makes them vulnerable if the other two sorts of activity take up too much time.

Let's bring this model to bear on the researchers' case, using terms which suit their role better : duties, requests and creativity.

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris

tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org

⁵ M. Berry (1995), "From American Standards to Cross-Cultural Dialogues", forthcoming in *Handbook of International Management Research, Blackwell Publishers*

⁶J. L. Delpeuch and Anne Lauvergeon (1986), 'Sur la trace des dirigeants' (On the managers' trail), *Gérer et comprendre* no. 2, March 1986

<u>Duties</u>

This includes activities such as:

- guaranteeing to teach the hours allocated on his programme;
- taking part in meetings to decide allocation of funds (in directors' case);
- taking part in the CNRS commission sessions (Centre members);
- going to the CRG Monday morning meeting (of which more later);

Some of these duties are contractually part of the job (such as the teaching hours); for others, the consequences of missing them are serious (the meetings to allocate funds); others are specific to the institution (the Monday meetings at CRG) and may not be taken so seriously unless they are part of a thriving tradition. The duties increase as researchers progress in their career.

<u>Requests</u>

These include requests such as:

- agreeing to meetings in the field, or answering requests for such meetings;

- preliminary discussions for projects: "I'd like to suggest a topic for you, shall we meet for lunch and talk about it?";

- answering invitations: "I'd like to ask you to give a conference. What are your fees?";

- answering colleagues' questions: "I've written 90 pages already, but I don't know if it's any good, would you mind looking through it?";

- answering questions from other sources: "I'd like you to be one of the assessors for soand-so's thesis";

- asking for support: "I'd like to talk to you about the Ecole de Paris of management".

Some of the requests are easy to comply with, and even quite agreeable (a lunch in a good French restaurant for example). Others are difficult to turn down, such as assessing a thesis when one often has to find assessors for one's own students. Again, the further the researcher's career progresses, the more these requests start to fill his or her schedule.

<u>Creativity</u>

This accounts for activities such as:

- taking part in seminars or discussion groups: "I'm going to the 'Business Life' seminar";

- discussion: "That's an interesting idea, but I see it rather differently, because...";

- writing research papers: "This time I'm getting down to some real work!".

If this last is sometimes a howl of frustration, it shows how difficult it is for researchers to find the peace and quiet they'd been looking forward to. "*In our current state, urgent things take precedence over important things*", I was told by one manager. Researchers are beset by the same problem : as they become more senior, duties and requests become so overpowering that creativity would be lost altogether if the forces weren't counter-weighted. Redressing the balance is partly a matter of the researcher's own skill, but is also achieved by the deadlines and rituals which can bring creativity back into the schedule.

THE DEADLINES AND RITUALS WHICH ACHIEVE RESULTS

We're all aware that deadlines have a major influence on intellectual activity:

- meetings to discuss research papers encourage the participants to read texts which might never have got beyond the intended reading list otherwise;

- an invitation to address a conference leads to finishing a paper which would have been just another project in the pipeline;

- theses often come together only when the submission date has been fixed - and one of the director's skills is knowing the right moment to fix the deadline;

- as a publisher said, "Writing a book is a challenge, and a lot of people give up: it's important to pin authors down with contracts and deadlines: there's no intellectual production without deadlines".

Why do deadlines achieve results?

For people who always have too much to do, deadlines create urgency for important projects. People alter their schedules:

- by clearing the decks : "I can leave that, and that - and even that meeting, I can miss it";

- by refusing requests : "I can't discuss your project for another two months yet";

- by asking family and friends to be understanding : "Go without me; if I haven't finished this before tomorrow, there'll be hell to pay !".

Deadlines concentrate the mind : we fix on the notion that we have to finish in time. In this way we can work with some continuity in spite of interruptions.

Finally, working 24 hours around the clock helps tortured authors to put their ideas in order; and this is what helps the thesis writers. However, they too can cite urgency to avoid their supervisor's demands: "*I just can't do it in the time I've got left*". Hurry can become a kind of drug, in that it provides a permanent excuse.

The right sort and wrong sort of deadlines

Echéance, the French word for deadline, is not so ominous-sounding as the English; and indeed the French find ways to deal with deadlines which are difficult to meet, either by exceeding them or by compromising on quality. The force of a deadline is determined by the cost of any slackness in timing or quality. In fact, we have identified four different types of deadlines :

- deadlines that are vague on date and quality; these are the easiest to keep, but the quality and the date remain uncertain.

- deadlines that are firm on date but vague on quality; these are usually respected as regards time and date, but the quality is not necessarily the best.

- deadlines that are vague on date but firm on quality; delivery can be postponed several times, sometimes indefinitely.

- deadlines that are firm on both date and quality; obviously, these are the most pressing ones.

Deadlines are also characterised by the pay-offs they bring. Academics often refuse firm deadlines if the pay-offs are inconsequential. Let's look at different kinds of deadlines, with this in mind.

Deadlines with uncertain effect

Let's say that researchers obtain public funding for a project which requires a report eighteen months later. They don't take account of this date which is so far away and is not relevant to their work of the moment. Later they find that they have forgotten the deadline because they have so much else to do. However, they can have a further year's grace, and the penalty, the fine, is too high to be charged except in very serious cases. Besides, only a few copies of the report are printed. The report is assessed by an expert, but since the expert is also overworked,

he or she is bound to pass the report unless it is seriously substandard : to reject it would call for a detailed case against it, which represents a lot of work. In this way a number of reports are submitted a year late, and are written in hurry. Administrative deadlines on these principles are not the right sort of deadlines : they are vague on both date and quality.

Self-imposed deadlines need a high degree of personal organisation if they are to be kept : they are often, you might say, like a drunkard's promise to reform.

Deadlines may also be promises made to someone else, as in:

"Could you write an article for <u>Gérer et Comprendre</u>?" (firm deadline on quality) "Not right away, but in three months it shouldn't be a problem!" (softening the deadline) They have more force than the deadlines we set ourselves, but the other person may still have to exert a lot of energy to have them honoured, and may not even succeed at that. Paradoxically, it's easier to break promises to friends than to people we don't know very well : it's easier to plead indulgence from a friend.

The right sort of deadlines as complex social constructions

The right sort of deadline is therefore a complex social construction which sets a high price on any slackness in timing or quality. Here are some examples:

"*Could you write an article for the special issue in December?*" The person asked knows that if it isn't ready in time a reference number can be published without his or her article. This is a way to make the date deadline firmer.

"Would you do a presentation for the 'Business Life' seminar next May?" Once the person has agreed, the organiser publicises the speaker's name in order to reduce the risks of a later refusal.

The organisation of public presentations creates fixed deadlines (firm deadlines on date). The quality of the presentation and the amount of preparation are nonetheless dictated by the audience's importance for the speaker. If a great performer is invited to a gala event he or she may not prepare much (vague deadline on quality). If on the other hand he or she is performing in a prestigious venue and knows that the performance will be watched by harsh critics, he or she will rehearse minutely (firm deadline on quality). Similarly, the audience's value to the speaker's ego influences his or her preparation. It happens sometimes that a seminar which is usually characterised by sessions of a high quality rates a disappointing performance from a star speaker : the audience didn't flatter his or her ego enough.

Deadlines and rituals

Consequently, fixing the right sort of deadlines involves tailoring the prestige of the event to the stature of the speaker or contributor; but in that case, how can we be sure of attracting a sufficiently demanding and prestigious audience? Audiences don't gather just because of a name and a discussion topic, unless it is for a star speaker. However, the right rituals can help to create the right context. I'll give you some examples :

- submitting a thesis is an important event in the French researchers' career; yet everyone knows that the candidates will be passed, and probably with a distinction. Nonetheless they are staking their reputation and that of their supervisor and their team. The ritual of submitting the thesis has a considerable effect on the writing process, since the writers are keen to avoid harsh criticism and to attract the welcome approval of their efforts.

- 'Business Life' is a ritual which brings together a small audience of regular participants each month, and produces transcripts. The small scale of the seminars themselves makes discussion easier, but may not make for a sufficiently prestigious (or frightening) audience. The pressure is created by the publication of the transcripts : if the ideas in them are uninspiring, the readers will be disappointed, and their opinion matters to the speakers. As a result they will take some trouble in preparing their topic, and the organisers will take some trouble in choosing their speakers and briefing them. The transcript is a key part of the ritual : it makes the quality deadline firmer for both the speaker and the organiser. The fact that the public is composed of both practicians and academics also characterises the field of judgement : the former expect relevance the latter rigour.

A journal is a ritual in that it regularly brings together an editorial committee who discuss the articles submitted. These meetings create deadlines for the committee members, who are supposed to send in a written verdict before the meeting (this is usually faxed in at the last minute...). Readers get into the habit of reading the journal regularly - another ritual - and so discover authors and ideas which might otherwise have passed them by. The committee has to put together a balanced contents list for each edition, and may have to fill the gaps if the edition is short of articles. However, it's rare that a journal creates the right sort of deadlines for its authors : it's difficult to get as many articles as one needs when one needs them, especially given the awkwardness of commissioning an article which is then dropped - something which happens often enough if the editorial committee is particularly stringent. On the other hand, the opportunity for taking advantage of a seminar such as 'Business Life' reduces the risks of gaps in the supply of articles.

ORGANISING RESEARCH BY MEANS OF RITUALS AND DEADLINES

"He (Steve Jobs) and a lot of other executives at Apple didn't act like directors: they were impresarios.(...) The impresario has to be admiring and demanding of his artistes in turn. On an artistic level, he makes sure that the organisation and the staging make it possible to produce a masterpiece.(...) At Apple, we give an executive a company of artistes: we provide the infrastructure, the scenery and the technical support; finally, we applaud the performances of members of the company, who often turn out to be stars in their own right".⁷

In the same spirit, the best way to encourage research is to act as an impresario by organising events which inspire researchers to excel themselves. However, the research directors have to be more than traditional impresarios : they have to create rituals and organise deadlines which will achieve the results they are looking for. I'll demonstrate this by citing a few projects I've been associated with myself.

To stimulate collaboration at the CRG a certain ritual is established⁸: each Monday morning there is a meeting centred on the presentation of a fieldwork research, the discussion of ideas in the pipeline and so forth. Once a month this meeting is a *thesis seminar* in which the thesis students talk about the progress of their work, having sent in a ten-page abstract in advance. This is a good sort of deadline, in that the thesis students are there to uphold their reputation : the papers are well-prepared and the discussion is productive and helpful both to the authors and their supervisors. These Monday meetings represent less pressing obligations for the senior members, whose status is more assured. To keep the ritual relevant it is important to come up with new ventures, such as discussing prospective articles, which is useful to the authors in providing them with a critical audience, and brought some liveliness to the debate.

After a period of internal tension within the CRG we had the idea that it might be better to write about controversial subjects, since writing allows for a calmer and more precise expression of opinions. The result was the launching of an internal newssheet, *La Gazette*. This is distributed within the CRG and to a limited number of other subscribers, and creates a forum for free discussion of theories and projects in mid-term. Elisabeth Szuyska, the *Gazette*'s editor-in-

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris

tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org

⁷John Sculley (1988), De Pepsi à Apple, Grasset, (p.167) "English translation of the French version of the book "Odissey", by John Sculley, (1987)"

⁸I shall not discuss the creation of rituals here. I'll just mention that setting up this seminar series required considerable involvement on my part, and keeping it going calls for the vigilance of my successor, Jacques Girin; and although we all think very highly of it, any sessions cancelled are a bonus when one is behind with one's workload...

chief, is constantly on the look-out for ideas to revive debate, and shows how a light touch and elegant style (as evidenced by her contributions to the Ecole de Paris newsletter) make it possible to deal with delicate subjects without losing a cutting edge. Ten years and over fifty issues later, each number of the *Gazette* is still eagerly awaited.

Fieldwork is essential to the CRG's approach, but other activities compete for attention. Work in the field is maintained by means of rituals, and it must be said that they are financial in essence. Researches in the field lead to commissions which contribute to the Centre's upkeep. There are regular meetings within the CRG to look over the accounts, and each member's contribution is made clear. The system is not so mechanical as in profit centres in commercial enterprises, but everyone takes care not to be consistently at a disadvantage. Economic requirements are good stimulants for work in the field, as long as they do not get out of hand.

In 1985 we had the opportunity to launch the journal *Gérer et Comprendre (Understanding management)*, which aims to combine academic credibility with a wide readership amongst management professionals, reflecting the CRG's own dual focus in the academic and the practical world. The CRG's researchers contributed a great deal to the launch, submitting articles, recognising that the journal was a chance to earn recognition for their style of work. Subsequently, the number of articles from the CRG grew less, especially from the senior members : their schedules were increasingly full, the journal was getting by without them, they were asked to contribute to other journals or joint books, the pressure to publish is weaker in France than in USA - and perhaps they knew me too well for the promises of writing "*a big article, really soon*" to be very reliable...

We've seen how the 'Business Life' seminar presented the means to fix deadlines which were more definite than those of a journal; but we could go even further by attracting international attention. The Ecole de Paris of management, is an school without walls defined by its rituals. There are meetings of different kinds, from small-scale breakfast meetings to seminars and conferences. Researchers and management professionals both take part in these activities : they are a meeting-point for theory and practice. Each event is documented in a transcript which is distributed in France and abroad, with a number of transcripts available in English. A quarterly bilingual newsletter is sent out, aiming to increase the number of people associated in the venture. In this way we hope to attract a larger and larger audience, which will make for ever more stimulating deadlines to encourage authors wh o are more and more in demand.

II - DISCUSSION

The model called into question

Comment: Your model doesn't allow for the time researchers take to advance their career : some take months preparing applications for directorships of research institutes.

M. B.: That's another deadline : they have to submit a resumé of qualifications and work to date to the CNRS, putting their work in perspective, by a certain date. This is read by a delegate who decides whether or not to shortlist them. It's the right sort of deadline, too : the resumés are submitted by the date specified and often make very interesting reading.

A former physicist : Your figures aren't appropriate to physics. It's true that experiments create deadlines : large-scale equipment has to be reserved well in advance, and everything has to be ready. However, reading has to be managed a little at a time, with summaries and short notes. To write something one has to set aside time on one's own twice or three times a year. In the laboratories I've known, discussion with colleagues is very rare other than in the obligatory weekly forum. Lastly, laboratory directors have no more research duties in principle, and can undertake their role as they should throughout the week.

M.B.: I was speaking of ideal research : ideal directors undertake research. In social sciences the reading is heavier and the writing more difficult than in physics. Above all, skill is gained over time, and the duties of directing research build up when one is best at actually producing the material. Managing one's schedule is therefore crucial in social sciences.

I know that collaboration is unusual, but it's one of the CRG's strengths and I've made every effort to keep it that way; and as a result I've discovered that it calls for a lot of inventiveness in terms of rituals.

A professor in management : The model loses sight of the researcher's particularity you'd think we were talking about businesspersons! The weekly cycle isn't a true reflection either : researchers have to manage their schedule over months at a time.

M. B.: It's a flexible model, and using the week as a term of reference isn't really important. Are researchers comparable to businesspersons? Yes : the main difference is that their deadlines require a longer period of personal preparation.

Comment : I worked in research for a large institute in Germany, and there our working rhythm was smoother. Each day they brought us the journals we had to read, and the reading took several hours, and then we would start writing. Maybe we weren't under the same pressure as the CNRS, which has to do a great deal to achieve its recognition.

M. B. : That's partly true; but it's also because we're at the interface between two worlds with different ways of thinking : the academic world measures production in terms of publications, and hardly takes into account how much time has to be spent in the field. The business world would rather we spent more of our time with them, in the field. People at interfaces generally have complicated schedules to manage.

A lab director : The model glosses over the learning process : with experience, we learn to save time, which allows us to do the fieldwork more quickly.

A young researcher: Do you spend as much time as we do on details?

The director: We know how to get to the heart of the matter more quickly. The established professionals can save a lot of time in that respect.

M. B.: Someone more experienced can formulate an assessment more quickly, but risks glossing over factors which prove to be important when you observe a process of change closely. Close observation does take time, because one has to go back into the field time and again. Similarly, it's sometimes a good idea to go back in history, which means investigating the archives. It's often a pity that synchronic analyses predominate over diachronic analyses; but the latter are difficult to accommodate in the schedule, which is one of the reasons why synchronic approaches are more usual.

Turning things down

The director: You're leaving out something important : gaining a degree of status allows one to turn things down. I'm now in a position to ignore an increasing number of requests; and indeed, turning things down actually increases my standing; so my degree of liberty is also increasing.

The former physicist: When I was preparing to go and work in Brussels for the EEC, a highly-regarded French laboratory director advised me: "If you're invited to three meetings at the same time, accept them all." It's known as the gift of ubiquity; and besides, it's quite usual for two of the meetings to be cancelled.

A successful industrialist: I'm astounded. In all my career, for 51 years, I've never missed a meeting or an appointment!

The former physicist: The meetings are governed by a mixture of interests: some people are invited as a mark of respect, and others because they may be useful to the work in progress. If you have a high standing, you're invited out of respect, and even if you don't turn up, it's as though you were there anyway.

M. B.: Thierry Gaudin quipped that in certain circles people's importance is measured, not by what they do, but by what they haven't time to do. The corollary is that when there are a lot of important people, a lot of things don't get done ! Of course it's possible to ignore what's expected of us more and more - but is it good for those around us?

Preserving the essential

A CEO: When I applied the model to my own case, I could see that my ideal schedule was far in excess of the real one, and I started thinking about how I managed my time. It seems to me that the interesting thing isn't turning things down, but preserving what seems essential. With this criterion, you could say that there were three sorts of bosses :

- those for whom the most important thing is maintaining their own reputation; they spend a lot of time with the media;

- those for whom it's production: they're greedy for figures and watch over orders, production or finance personally;

- those who aren't prepared to sacrifice time with their colleagues, which is how I feel myself.

The sceptical director: The way the researchers allocate their time is also governed by which markets they prefer. The media market has grown, along with French companies' interest in social sciences. This results in requests for interviews or conferences on subjects which are beyond the field of their research. It's not a profitable exercise : people are drawn into reproducing theories rather than producing ideas. The ones who limit themselves are more productive, and pay more attention to their colleagues.

M. B.: I myself regard the time I spend with my colleagues as very important. I even ritualise some of my working relationships. For example, at the end of a meeting with one of the graduates I supervise, I always arrange the next meeting for about ten days later. Similarly, since I'm in charge of the doctorate course at the CRG, I meet all the doctoral students every six weeks. If I ever forget to fix the date of the next meeting, I risk having the relationship slacken : one can never have too much respect for schedules.

As regards my own work, I try to arrange the right sort of deadlines. For this reason I seized an opportunity to give this presentation when a speaker pulled out : I wrote myself into his place to explore an idea I'd been mulling over for two years.

A general manager: In my firm, too, there's a considerable gap between what's desirable and what's actually possible. Under pressure, we tend to give precedence to the most immediate obligations. Because of this, I try to manufacture deadlines so that we don't ignore the long term and put off the difficult decisions until later. However, the French don't feel too much bound by a deadline. I work for an American group, and I notice the contrast with the Americans.

Because of this, I follow M. Berry's reasoning : I make sure deadlines are respected by making the consequences more serious if they aren't. I know of three methods : appealing to people's egos, frightening them or having recourse to very expensive consultants, which dramatises the deadline.

Should research be directed?

The sceptical director: I have a rather different concept of running a laboratory : I try not to create rituals, and to reduce collaboration to a minimum. A lot of social science research teams became paralysed when ritual and collaboration led them to be too dependent on their directors. The director became something of a cult leader, isolating his or her team and narrowing their scope. I wanted to break with this kind of system; I see my role as director in allowing my team to work independently, not forcing them to toe the director's line.

M. B.: Rituals needn't narrow anyone's scope if criticism is encouraged. At the CRG there were sometimes heated discussions.

J. Girin (current director of the CRG) : We should bear two things in mind. Firstly, the founders of the CRG were more or less of an age, so it wasn't a laboratory with a master and his disciples. Secondly, the CRG was, in effect, a group of amateurs, who had chosen to go against the trends of the time. They were amateurs in two ways : they had no previous training in social sciences, and they were working in a field - management theory - which wasn't yet recognised in the French academic world; so they had no landmarks, unlike disciplines such as economy or sociology. Isolated researchers might have gone off course, and collaboration was an essential means of control.

A researcher: The model shows how the researcher has to establish priorities. It's a bit like air traffic control : the queues of planes coming in to land have to be managed, with priority going to the ones which are short of fuel or which are carrying VIPs. However, the analysis doesn't include one important criterion, which is pleasure in one's work.

When I started out in research, I thought I'd be sacrificing money for time - I'd earn less, but I'd be working less hard. I was quite wrong, I work very hard; but my time is worthwhile. I appreciate a good seminar, some fascinating reading, finishing a good paper. I try to make enjoyable work a priority as far as possible, and anyway we work best when we enjoy what we're doing. I don't see this dimension in your analysis.

M. B.: Taking up the air traffic control simile, there might be such a queue of planes waiting to land that some never get to take off; and the cancelled flights might be the most interesting ones.

Enjoyment isn't the researcher's exclusive preserve : some find great satisfaction in closing a deal, building a bridge or winning a market. Ultimately sources of satisfaction can evolve over time. I've seen some researchers whose talent is wasted in easy successes; it's like sport, where players lose ground if they don't compete at the highest level. That's why I think it's important to set up the mechanisms for plaudits and challenges which encourage the production of new ideas.